

**AGENCY FOR INTERNATIONAL DEVELOPMENT AND
U.S. CLIMATE CHANGE POLICY**

HEARING

BEFORE THE

SUBCOMMITTEE ON INTERNATIONAL ECONOMIC
POLICY, EXPORT AND TRADE PROMOTION

OF THE

COMMITTEE ON FOREIGN RELATIONS
UNITED STATES SENATE

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AGENCY FOR INTERNATIONAL DEVELOPMENT AND U.S. CLIMATE CHANGE POLICY

WEDNESDAY, JULY 28, 1999

U.S. SENATE,
SUBCOMMITTEE ON INTERNATIONAL ECONOMIC
POLICY, EXPORT AND TRADE PROMOTION,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The subcommittee met at 2:02 p.m., in room SD-419, Dirksen Senate Office Building, Hon. Chuck Hagel (chairman of the subcommittee) presiding.

Present: Senators Hagel, Sarbanes, and Kerry.

Senator HAGEL. Good afternoon. Welcome.

The subcommittee today considers the climate change programs of the Agency for International Development. I welcome our special witness, Hattie Babbitt, the acting Administrator for the Agency for International Development.

Ambassador Babbitt comes with a distinguished public service background. Before joining AID, she served as U.S. Ambassador to the Organization of American States from 1993 to 1997. From 1988 to 1993, she served on the board of the National Democratic Institute for International Affairs where she chaired the Latin American Committee. Prior to joining the administration, Ambassador Babbitt was an attorney with Robbins & Green from 1974 to 1993.

Last month, this subcommittee heard from the State Department's nominee to head climate activities regarding his role in developing pilot emissions trading programs with Russia. The committee had received documentation of meetings by EPA to create a pilot program for trading in carbon emissions, a mechanism called for in the Kyoto Protocol on Climate Change.

Previously the administration had assured this committee and the Congress that there would be no implementation of any aspect of the Kyoto Protocol unless the Senate gave its advice and consent. I was, therefore, surprised by the administration's legalistic view of "implementation" that came to light in that hearing. In fact, there were two hearings. According to EPA lawyers—and I quote—"because the possible pilot program would not impose any legal obligations on the United States or on the United States private sector, the issue of relying on authorities provided under the Framework Convention on Climate Change does not arise," referencing the Framework Convention on Climate Change which I think most of you understand is a United Nations organization.

The contorted argument put forward by these lawyers is that the United States can engage in all activities called for in the Kyoto

Protocol so long as the administration justifies its activities as the legitimate exercise of the President's foreign affairs powers.

This subcommittee has over the past 3 years sought to address the issue of climate change directly and, I might say, honestly. This is the first time that we will hear directly from the Agency for International Development regarding its programs in this general area. I know, as Administrator Babbitt does, that we will both look forward to a direct and honest appraisal and discussion on this issue regarding the climate programs specifically that AID is undertaking with its current budget.

One of the key issues of this hearing is what constitutes implementation of the Kyoto Protocol. It is rather clear to me that creating an emissions trading system directly tied to implementing or preparing to implement the Kyoto Protocol is, in fact, implementation of the protocol.

Credits gained through emissions trading can only have value in the context of a global rationing system that was envisioned by the Kyoto Protocol, and only if the Kyoto Protocol is ratified and implemented. Development of an emissions trading system within a country will have no value unless an international mechanism exists to trade the emissions. I will look forward to Administrator Babbitt's response to this statement.

Madam Administrator, there is a long and unfortunate history of broken assurances by this administration on the climate change issue with the Congress, and I am hopeful that we will be able to get over some of that in our dialog today.

One 1999 AID notification that I would like to discuss this afternoon in some detail funds a project in the Newly Independent States. Funds for the project are to be used for "tracking emission reductions and developing an institutional infrastructure that will stipulate emissions trading and joint implementation investments." Now, it strains credible debate to suggest that this program is not designed to lay the groundwork for an international emissions trading scheme, as called for in the Kyoto Protocol.

Programs such as these not only further erode the trust Congress has toward this administration regarding the Kyoto Protocol, but also jeopardize cooperation on other energy efficient projects that will benefit developing countries while also reducing greenhouse gas emissions.

Just last week, the President stated that the Kyoto Protocol was not yet in his terms "ripe" for Senate consideration. Now, it strikes me that with this administration's variations in definitions, the Senate will be asked to consider the Kyoto Protocol only after a worldwide emissions trading scheme is a done deal and funded by the United States. Now, that is hardly a means to engage the Congress in an honest, open debate on the wisdom of the emissions trading schemes and other mechanisms created by the Kyoto Protocol.

And I might ask the question, what about the limited resources that are redirected away from important AID programs to fund Kyoto Protocol type programs?

Madam Administrator, I hope we can agree on some boundaries today that cut directly to the AID climate change initiatives. If AID is to become one of the funding mechanisms for the Kyoto Protocol

implementation, the agency is in for some very difficult work ahead, especially in justifying its expenditures of taxpayers' dollars to implement a treaty that has not yet been ratified, as a matter of fact, a treaty that has not even yet been submitted to the U.S. Senate. This action, of course, as you would understand, would have very significant consequences on future funding and current programs.

This committee looks forward to your testimony and we thank you very much.

Just in time, we have our distinguished colleague, the senior Senator from Maryland. Senator Sarbanes, welcome.

Senator SARBANES. Thank you very much, Mr. Chairman.

I am pleased to join you in welcoming Hattie Babbitt, the acting Administrator of USAID, before the subcommittee this afternoon.

USAID has a number of interesting projects in India and in other developing countries to help improve energy efficiency and reduce greenhouse gas emissions. I welcome this opportunity to examine the work they are doing in this area.

I gather that there are some concerns about the relationship of these programs to the Kyoto Protocol. I have to confess, it is difficult for me to understand how programs to mitigate the negative impact that developing countries are having on climate change could possibly be construed as "back-door implementation" of a treaty. In fact, it is exactly what we have said must be done before the Kyoto Protocol is submitted for Senate advice and consent to ratification. The efforts of developing countries are critical to our own success in preventing global warming, which is a problem I think we have a responsibility to address. We take a number of measures in this country to try to reduce global warming, from mass transit programs to even more direct proposals. I cannot understand why there is something amiss when we are supportive of programs to improve energy efficiency and reduce greenhouse gas emissions in developing countries.

Further, as I discussed at the nomination hearing for David Sandalow, who unfortunately is being held up on the Senate floor for unrelated reasons, the debate over the Kyoto Protocol should not prevent us from undertaking voluntary environmental projects that are otherwise in the U.S. interest.

Actually, we ratified the Framework Convention on Global Climate Change, under which the United States has a general legal obligation to adopt policies and take other measures to mitigate climate change. That is something we adopted and have put into place.

So, I welcome this opportunity to hear from the acting Administrator, who will help to clarify any misunderstandings or misperceptions that might exist. It seems to me these projects are desirable and I see no reason why they should not proceed. I look forward to the opportunity to explore that matter here this afternoon.

Senator HAGEL. Senator Sarbanes, thank you.

Again, welcome, Administrator Babbitt. We appreciate your being here. Please proceed with your testimony.

STATEMENT OF HON. HATTIE BABBITT, DEPUTY ADMINISTRATOR, U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT; ACCOMPANIED BY DAVID HALES, DEPUTY ASSISTANT ADMINISTRATOR

Ms. BABBITT. Thank you very much, Mr. Chairman. I am glad to be here today to discuss an issue of great interest to us all, and that is global climate change.

I know we all agree on the importance of protecting and preserving the environment. We in the United States take pride in our initiatives to limit pollution, improve energy efficiency, and preserve the world's resources. We believe that from an environmental and economic perspective, global climate change is of the utmost importance. It poses profound threats to international economic development and ecological balance.

Although the United States remains the world's leading emitter of greenhouse gases, developing countries make up an increasingly large share of the global emissions problem. Their emissions are expected to surpass those of industrialized nations in the next 20 years. As countries like India and China bring dozens of new coal-fired plants on line each year, their emissions of carbon dioxide will grow greater and greater.

The predictable impact of global climate change endangers our best efforts to build sustainable economic and social progress in developing nations. And obviously the threats to our own country, in terms of our people's health and our national economy, are a most serious concern.

We believe that climate-related programs are essential to our development mission, that they promote our national interests and that they are consistent with our national obligations under the Framework Convention on Climate Change and with Congress' approach to international action on climate change. Let me state, Senator, emphatically that USAID's climate related activities are fully consistent with the administration's pledge not to implement the Kyoto Protocol before the Senate has given its advice and consent and it has been ratified by the President.

We are carrying out a climate change strategy that was developed and announced before the Kyoto Protocol was negotiated. Our programs stand on their own merits, and in our view they advance the goals of Byrd-Hagel in that they build capacity in developing countries to take further action to address global climate change.

In addition, USAID has been an active participant in the inter-agency policy process and in multilateral activities of the Framework Convention on Climate Change, working to strengthen the mechanisms under the convention that promote wise development and environmental protection.

Looking back, we see that in 1990 USAID submitted its first report to Congress on global climate change and developing countries, and the agency was active in support of the negotiations of the Framework Convention. Our approach has consistently focused on opportunities to advance economic development goals while curbing greenhouse gas emissions. More efficient use of energy, renewable energy applications, and sustainable forestry practices are good examples of this common sense approach to climate change and development.

In 1994, responding to the Framework Convention and to congressional requests, we issued our first climate strategy. In June 1997, prior to the negotiation of the Kyoto Protocol, President Clinton announced to the United Nations General Assembly Special Session on the Environment a renewed U.S. effort to help developing countries address climate change. Called the Developing Country Climate Change Initiative, it is a 5-year, \$1 billion commitment to work with developing countries to encourage climate-friendly energy and natural resource management policies and practices in developing countries.

USAID is carrying out this initiative which focuses on mitigation of emissions by targeting clean energy applications, forest conservation, and support for policy reform and privatization. This year the agency is funding approximately \$150 million in climate related activities in energy and forestry in 44 countries.

Meeting the challenges of climate change and encouraging sound energy policy will create significant opportunities for U.S. business and vast new markets for U.S. technology worldwide. The potential market for climate friendly technologies is enormous. The world market for energy efficient technologies has been estimated at almost \$1.8 trillion over the next 40 years. The potential market for renewable energy is also vast and incentives for cleaner production will help to create new markets overseas in an area where the U.S. is highly competitive.

Mr. Chairman, as you know, we have notified Congress of our intent to invest in several important energy programs in India which are related to climate change. USAID's global climate change program in India targets the development of clean energy policies and projects. The program helps encourage India to take practical steps to reduce emissions. With our assistance, India has made impressive progress in improving the efficiency of its power plants, reducing pollution in key industries, and expanding the use of renewable energy technologies nationwide. These actions have resulted in a 2 million ton reduction of annual carbon dioxide emissions by power plants of the National Thermal Power Corporation and by the Gujarat Electricity Board.

Our activities in India are good for U.S. business. The program is a decade old and is reaching maturity with regard to its results. For example, the recent signing of a new partnership agreement between leading Indian and U.S. power utilities and regulatory agencies provides a long-term mechanism for transfer of U.S. technology and experience. Moving forward with the global climate change program will enhance U.S. commercial interests in India, as well as addressing our concerns about the global environment.

Thank you very much, Mr. Chairman. I would be happy to answer any questions I can.

[The prepared statement of Ms. Babbitt follows:]

PREPARED STATEMENT OF HON. HARRIET BABBITT

Thank you, Mr. Chairman. I'm glad to be here today to discuss an issue of great interest to us all, that of global climate change.

I know we all agree on the importance of protecting and preserving our environment. We in the United States take pride in our initiatives to limit pollution, improve energy efficiency and preserve the world's resources.

We believe that from an environmental and economic, global climate change is of the utmost importance. It poses profound threats to international economic development and ecological balance.

Although the United States remains the world's leading emitter of greenhouse gases, developing countries make up an increasingly large share of the global emissions problem. Their emissions are expected to surpass those of the industrialized nations in the next twenty years. As countries like India and China bring dozens of new coal-fired power plants on line each year, their emissions of carbon dioxide will grow greater and greater.

The predictable impact of global climate change endangers our best efforts to build sustainable economic and social progress in developing nations. And obviously the threats to our own country, in terms of our people's health and our national economy, are a most serious concern.

A worldwide issue of this complexity demands a cooperative approach. We at USAID believe that our relationships with Congress, the private sector, nongovernmental organizations and the developing nations have been open and productive, and we are proud of the support we have received in this decade and the successes we have achieved.

We believe that climate-related programs are essential to our development mission, that they promote our national interests, and that they are consistent with our national obligations under the Framework Convention on Climate Change (or FCCC) and with Congress' approach to international action on climate change. Let me state emphatically that USAID's climate related activities are fully consistent with the administration's pledge not to implement the Kyoto Protocol before the Senate has given its advice and consent and it has been ratified by the President. We are carrying out a climate-change strategy that was developed and announced before the Kyoto Protocol was negotiated. Our programs stand on their own merits, and in our view they advance the goals of Byrd/Hagel in that they build capacity in developing countries to take further action to address global climate change.

In addition, USAID has been an active participant in the interagency policy process, and in multilateral activities of the Framework Convention on Climate Change, working to strengthen the mechanisms under the Convention that promote wise development and environmental protection.

Looking back, we see that in 1990, USAID submitted its first report to Congress on Global Climate Change and Developing Countries, and the agency was active in support of the negotiations of the FCCC. Our approach has consistently focused on opportunities to advance economic development goals while curbing greenhouse gas emissions. More efficient use of energy, renewable energy applications and sustainable forestry practices are good examples of this common sense approach to climate change and development.

In 1994, responding to the FCCC and to Congressional requests, we issued our first climate strategy. In June, 1997, prior to the negotiation of the Kyoto Protocol, President Clinton announced to the United Nations General Assembly Special Session on Environment a renewed U.S. effort to help developing countries address climate change. Called the Developing Country Climate Change Initiative, it is a five-year, \$1 billion commitment to work with developing countries to encourage "climate-friendly" energy and natural resource management policies and practices in developing countries.

USAID is carrying out this initiative, which focuses on mitigation of emissions by targeting clean energy applications, forest conservation and support for policy reform and privatization. This year, the agency is finding approximately \$150 million in climate-related activities in energy and forestry in 44 countries.

Our worldwide efforts have met with a great deal of success. For example:

- The USAID forest management program in Mexico has reduced the deforestation rate on 3.1 million hectares of protected land by more than 30 percent.
- The agency's Sustainable Forestry Practices Initiative, worldwide, has reduced by 70 percent the damage caused by poor land management on over 3.4 million hectares of forests.
- A rural electrification program in the Philippines has reduced power line losses by three percent and reduced carbon dioxide emissions by 250,000 metric tons.

Promoting the balancing of economic growth with sound environmental practices is central to our mission and serves the U.S. national interest. In the long term, economic development will be enhanced, not compromised, by efforts to reduce greenhouse gas emissions. Our efforts promote a "win-win" approach by addressing the impact of climate change through long-term partnerships with developing countries that engage market forces and produce mutual economic and environmental benefits for all involved.

Meeting the challenges of climate change and encouraging sound energy policy will create significant opportunities for U.S. business and vast new markets for U.S. technology worldwide. The potential market for climate friendly technologies is enormous. The world market for energy efficient technologies has been estimated at almost \$1.8 trillion over the next 40 years. The potential market for renewable energy is also vast and incentives for cleaner production will help to create new markets overseas in an area where the U.S. is highly competitive.

The technology, capital and innovation of the private sector are the driving forces that will make a lasting difference in the carbon intensity of development in the next century. USAID's role is to help enable the private flows of capital and technology by supporting appropriate policies, privatization, capacity building measures, and efforts to overcome market barriers in the developing world.

Ours is a practical approach. We promote energy efficiency by encouraging integrated resource planning and demand side management, creating financing mechanisms for energy efficiency, developing standards and codes for efficient buildings and appliances, and carrying out pilot and demonstration projects for steam, lighting and motor efficiency. We encourage privatization and work to reform inefficient state-controlled energy systems. We encourage market-based incentives for the application of clean technologies and practices (natural gas, energy efficiency, renewable energy, low impact logging) to meet the growing demands of industrializing economies. And we address foreign legal and policy constraints to cleaner energy production and use, and improved natural resource management.

Mr. Chairman, as you know, we have notified Congress of our intent to continue to invest in several important energy programs in India which are related to climate change.

India is the sixth largest and second fastest growing emitter of greenhouse gases in the world. India has serious air pollution problems; air pollution will cause an estimated 2.5 million premature deaths there this year. India's environmental challenges have global implications.

USAID's global climate change program in India targets the development of clean energy policies and projects. The program helps encourage India to take practical steps to reduce emissions. With our assistance, India has made impressive progress in improving the efficiency of its power plants, reducing pollution in key industries, and expanding the use of renewable energy technologies nationwide. These actions have resulted in a two million ton reduction of annual carbon dioxide emissions by power plants of the National Thermal Power Corporation and by the Gujarat Electricity Board.

Our activities in India are good for U.S. business. The program is a decade old and is reaching maturity with regard to its results. For example, the recent signing of a new partnership agreement between leading Indian and U.S. power utilities and regulatory agencies provides a long-term mechanism for the transfer of U.S. technology and experience. Moving forward with the global climate change program will enhance U.S. commercial interests in India, as well as addressing our concerns about the global environment.

We believe that our efforts, in India and throughout the world, directly promote Congressional goals, especially the engagement of developing countries in aggressively combating climate change. And, finally, we believe that these programs are good, common sense development—and that they are effective.

Thank you. I'll be glad to take your questions.

Senator HAGEL. Madam Administrator, thank you very much.

Are you in need of more water up there? Senator, she is having a little respiratory problem. So, she is not coughing at us, she said.

Ms. BABBITT. I am coughing but not at you.

Senator HAGEL. Yes. Well, it is another global climate change ploy that you are using, I know, Administrator Babbitt, coughing and blaming it on greenhouse gases.

What we will do, Senator Sarbanes, if it is agreeable with you, with the two of us here, we will do 10-minute rounds and go from there. Thank you.

Madam Administrator, this year—I think it was in June—I mentioned it in my earlier statement—AID notified this committee of its intent to obligate additional funds for an energy efficiency and market reform program begun in 1992. And we have, I think, ref-

erenced it. The notification indicated that the additional resources would be used in Europe and the New Independent States for, as I mentioned in my opening statement, "tracking emissions reductions and developing an institutional infrastructure that will stipulate emissions trading and joint implementation investments."

Further, the notification indicated to this committee that funds would be used for "identifying policy changes which are necessary to move the climate change agenda forward and assisting the countries in adopting and implementing appropriate policy measures."

Using that as a base, I have a series of questions, Madam Administrator, that I would like to ask you about.

The pilot program funding is part of, my understanding, a 10-year project that has, I understand, no estimated cost for the life of the project. Now, if you have different information, I know you will share that with me. What are the expected costs? And if you do not know those estimated costs now, I know you will provide them for the record. But if you do not know those costs or have some sense of it, then maybe you could explain why would you engage a project without costing it out. But you might have the answers on the numbers, so we will allow you to respond. Thank you.

Ms. BABBITT. Senator, I am unable to tell from your question which congressional notification [CN] your question refers to.

Senator HAGEL. It was June 30, 1999. You have a copy there.

Ms. BABBITT. Are you referring to the copies I was given right before this?

Senator HAGEL. Yes. Funds for an energy efficiency and market reform program. What we can do is let us move on to another question, and we will pick that up as we go along when you find—she is giving it to you.

Ms. BABBITT. I believe that the CN to which you refer or the issue to which you refer is with reference to our program in Ukraine.

Senator HAGEL. And the New Independent States. I said generally and Ukraine would be one of them. Yes, that is right.

Ms. BABBITT. It is the Ukraine program with which I have some familiarity.

Senator HAGEL. OK.

Ms. BABBITT. I am not going to be able to answer your question at this time about the——

Senator HAGEL. Costs?

Ms. BABBITT [continuing]. What funds flow. But I am generally familiar with the Ukraine program. I underscore generally because we have lots of these programs around the world.

The Ukraine program is designed, as I understand it, to deal with institutional reform, that is, the policy reform within Ukraine, to assist with the creation of an evaluation program within Ukraine nationally to devise a national climate change program for Ukraine. I do not know how to say it any more elaborately than that.

It is also designed to bring into the Ukraine discussion non-governmental actors, an important aspect of many of our programs in the former Soviet Union, that is, to bring in industry and environmental groups and the public. It is designed to help administer a national climate change program and to establish market mecha-

nisms to reduce greenhouse gas emissions domestically within Ukraine. That was really the extent of my knowledge about the Ukraine program.

Senator HAGEL. If Mr. Hales would like to add anything, he is certainly welcome to do so.

Mr. HALES. Thank you, Senator. I think that the Administrator's response captures it.

Ukraine, as you know, is an Annex 1 country under the Framework Convention on Climate Change. We have been working with them for some time to reduce the pollution, both global and local, that comes from inefficient energy systems. The approach to that essentially involves the strengthening of regulatory and policy measures so that subsidies are reduced and privatization is encouraged. It involves technology transfer which is greatly in our interest because we tend to be a major supplier of those technologies.

And it also involves helping them measure their own greenhouse gas emissions and the source of those emissions which is an activity absolutely necessary for the eventual adoption on their part of the climate action plan.

Senator HAGEL. Do you know, Mr. Hales, what the numbers are on projected costs?

Mr. HALES. I do not, Senator. I apologize. I do not. We will provide that answer for you.

[The following response was received subsequent to the hearing.]

INFORMATION ON TN SUBMITTED TO CONGRESS ON JUNE 30, 1999—PROJECT #110-0003

The TN for Project 110-0003 includes three activities to be implemented on a regional basis in the New Independent States, including the Ukraine.

1. The Environment Information Systems and Networking project (EISN) addresses environmental information needs and awareness by promoting internet-based networks in the region. The Life of Project cost for this activity is \$1,480,025, of which \$996,025 has been notified (including \$450, 000 in this TN).

2. The Environmental Partnership Program activity promotes environmentally focused partnerships between local governments, enterprises and associations in the ENI region and counterpart organizations in the United States, and across borders within the region. Life of Project cost is \$12,466,815, of which \$4,462,500 has been notified (including \$267,700 in this TN).

3. The Global Climate Change activity includes two components that support the Agency's Climate Change Initiative. One component supports training and technical assistance in developing policy incentives and measures to reduce greenhouse gases. The second component supports the development of institutional capability for NIS countries to better track greenhouse gases and to take advantage of flexible mechanisms to stimulate investment in energy saving and less greenhouse gas intensive activities. Total Life of Project cost is \$2,084,800. This TN includes \$796,800 for this activity; this is the only notification to date for this activity.

Senator HAGEL. Do you know if the United States is funding the creation of an emissions trading system there? Is that part of the program?

Mr. HALES. I cannot answer it directly, Senator, but it would seem to me, just looking at the CN, that we probably here are looking at a typo in the CN. I would be willing to bet you that it says "stimulate" not "stipulate" in the original that came up. But I cannot answer your question. Certainly any emissions trading activities that we would be engaging in with Ukraine would be under activities implemented jointly which is a not-for-credit activity under

the Framework Convention for Climate Change, not under the Kyoto Protocol, which of course is not in effect.

[The following response was received subsequent to the hearing.]

INFORMATION ON TN SUBMITTED TO CONGRESS ON JUNE 30, 1999—PROJECT #110-0003

Mr. Hales noted a possible error in the TN provided to Congress on this project. USAID confirmed that mistake. The description of the "Global Climate Change" activity should read (change in bold):

Europe and New Independent (ENI) States key countries lack the financial resources and institutional capabilities to address climate change problems on their own. The funds will be used to help ENI countries meet climate change requirements by a) tracking emission reductions and developing an institutional infrastructure that will **stimulate** emissions trading and joint implementation investments, and b) identifying policy changes which are necessary to move the climate change agenda forward and assisting the countries in adopting and implementing appropriate policy measures.

Senator HAGEL. Has that project changed its focus from its original intent? If my understanding is right, the original intent you suggested: energy efficiency, market reform. You each mentioned that. On notifications that we receive now, there is a shift to environmental policy. Is that intentional or was that phased in? Was that part of what was envisioned over a 10-year period?

Mr. HALES. I think the focus, Senator, evolves but it remains fundamentally the same. It targets the constraints that an inefficient energy system has on both a society and an economy. I suspect that we have distinctions without differences in terms of those words because the fundamental focus of this program remains on trying to create a sustainable and economically effective energy system within the Ukraine.

Senator HAGEL. The notification that was sent to this committee references an AID climate agenda. Can you describe AID's climate agenda?

Senator SARBANES. Where is that reference, Mr. Chairman? I am trying to find it.

Senator HAGEL. You have it right there.

Senator SARBANES. Thank you.

Ms. BABBITT. Senator, I was unable to find the reference in the notification, but our climate change initiative, our broad climate change agenda, is aimed at reducing greenhouse gases either by reducing emissions or conserving forests, conserving sinks, that sort of thing, by policy and institutional change in developing countries or in countries with whom we work and also, to a certain extent, to decreasing the vulnerability of developing countries to those climate change implications. That is our climate agenda.

Senator HAGEL. It is in here. In fact, what it says—the Administrator has this. Right? OK. It is the United States Agency for International Development justification for technical notification, project 110-0003. Under the global climate change, \$796,000, down toward the bottom of that paragraph, it says which are necessary to move the climate change agenda forward in assisting the countries in adopting and implementing appropriate policy measures. That is where I was getting that, and that is why I asked the question.

Did you want to add anything to that before we go to Senator Sarbanes? Mr. Hales, would you care to?

Mr. HALES. No, except to say, Senator, that I think the use of that wording in that particular paragraph refers to the ongoing activities within Ukraine that we have tried to describe. And if the Agency has an agenda, it certainly is represented in the Agency Climate Change Initiative documents which you have and which were announced 2 years ago.

Senator HAGEL. Let me just also for the record and for Senator Sarbanes' benefit note my understanding is that the committee staff had notified AID of the specific notifications that would be the subject of this.

Ms. BABBITT. I am sorry not to have been prepared to discuss this one, but I had not seen this document until just when it was handed to me when I arrived.

Senator HAGEL. OK.

Senator Sarbanes.

Senator SARBANES. Mr. Chairman, just to be clear, it was our impression that the three notifications that this hearing was going to address involved the three programs in India. That was what we had been led to understand. I do not know what understanding AID had. I would ask AID. What understanding did AID have?

Ms. BABBITT. My understanding was the concern was with the three Indian notifications, 312, 313, and 314. I apologize for not being more familiar with the one with which the chairman began the questioning, but I just had not had a chance to review it.

Senator HAGEL. That is all right. Those answers can be supplied for the record. Sure. Thank you.

Senator SARBANES. The first question I want to put forward regards the United Nations Framework Convention on Climate Change, which was ratified by the U.S. Senate in 1992 and therefore is in effect. Is that correct?

Ms. BABBITT. Yes, Senator Sarbanes, that is correct.

Senator SARBANES. The Framework Convention says that the U.S. has an obligation to "promote and cooperate in the development, application, and diffusion, including transfer of technologies, practices, and processes, that control, reduce, or prevent anthropogenic emissions of greenhouse gases." It goes on to say that we have an obligation to "promote and cooperate in education, training, and public awareness related to climate change and encourage the widest participation in this process."

The first question I would put forward is whether you regard USAID's programs as consistent with our responsibilities under the Framework Convention, which was ratified by the U.S. Senate.

Ms. BABBITT. Senator Sarbanes, we do. It is the United States' obligation under the Framework Convention to encourage the participation of developing countries in meeting the goals of the Framework Convention. We believe that our climate change activities are part of the U.S. responsibility with respect to that obligation.

We look at our development responsibilities through the lens of our overall goal to promote sustainable development and look at the obligations under the Framework Convention as one of the ways in which we try to mitigate the damage that climate change

and non-efficient energy use in the developing world undermines that basic goal of promoting sustainable development in the countries in which we work.

Senator SARBANES. Yes. As I look at these three Indian programs, even if there were no Framework Convention in effect through Senate ratification, all three seem to be desirable programs as part of a U.S. effort to help sustainable development around the world. It seems to me that energy efficiency, for example, is a desirable objective. I have difficulty seeing what the problem might be with any of these proposals.

In any event, let me go on. To what extent do USAID's projects in India involve the participation and support of U.S. businesses and business organizations?

Ms. BABBITT. Senator, we have had enormous support from U.S. business with respect to the programs in India. India, as you may know, is one of the major contributors to greenhouse gas emissions. It is an enormous country, will be a billion people soon, and provides an enormous opportunity for the export of U.S. clean technology.

The bad news is that India gets an enormous percentage of its energy from coal, which is not used in an energy efficient way. The very good news is that the United States leads the world in energy efficient technology, and there is an enormous amount of interest by U.S. business in participating in a very large, very important Indian market. We have worked with General Electric, with Bechtel, with Enron, with American Electric Power, with Commonwealth Edison, with BP Amoco, with the Chicago Board of Trade, with the Air and Waste Management Association, with Duquesne Light, Edison Electric Institute, and others with respect to this very large potential market for U.S. technology.

Senator SARBANES. I went with Secretary Daley, the Secretary of Commerce, on a trade mission to India. One of the items that was on the agenda and very much sought after by the Indians was to develop energy efficient technologies.

You point out in your statement that there is a very serious air pollution problem in India. I can certainly testify to that from personal experience. You go on to say that, "air pollution will cause an estimated 2.5 million premature deaths there this year." It is obviously a pressing problem.

I was struck when you reference in your statement that "the world market for energy efficient technologies has been estimated at almost 1.8 trillion over the next 40 years." Earlier you pointed out that there were significant opportunities for U.S. business and large new markets for U.S. technology worldwide.

It is my understanding that the other advanced industrial countries are aware of the possibilities of the so-called green technology. This would include Japan, Germany, the UK, France, and others. They recognize the potential there. I saw these AID programs as an opening beach head for U.S. business to develop that market for green technologies. I gather that the U.S. businesses you have been working with see it the same way. Is that correct?

Ms. BABBITT. They do, Senator. We have engaged them in some of the programs thus far in terms of providing technical assistance

and in terms of interchanges. But obviously it is this potential, very large market that is of enormous interest to them.

Senator SARBANES. One of the major concerns in the Senate, a concern that I shared, along with most of my colleagues was the fact that key developing countries were not encompassed within the regime of meaningful participation in the Kyoto Protocol.

Leaving the protocol aside, it seems to me that many Members are concerned about the contribution to the problem made by a number of these major developing countries?

One of the major developing countries is India. It is the second most populous nation and is projected to be the most populous nation, on the basis of current trends, by about 2025. Any measures designed to help India achieve energy efficiency and apply some modern technologies to their energy use are highly desirable. I do not see why we would have any reason to not support that development. Aside from whether there will be a Kyoto Protocol, these are the sort of environmental measures we should support absent the protocol especially in an environment absent the Framework legislation.

Is that not the way AID sees this matter?

Ms. BABBITT. Senator, you are exactly right. The India energy efficiency program predates the conventions or the protocols, all of the documents in question, and fits directly into the issue of energy efficiency, that is, the pollution which results from the lack of energy efficient combustion in the old-time, old-fashioned Indian facilities and the danger to health, as you mentioned, with respect to the impact on children's health, but also with respect to greenhouse gas emissions.

We have had some real success fairly recently in working with India and particularly with the National Thermal Power Corp., which is the largest electrical provider in India, in an energy efficiency program which has worked for them, which allows them to burn less fuel, which is efficient for them, and saves them money, which produces fewer pollutants, which helps with respect to both greenhouse gases and the health issues arising from particulates in the air, and which has the benefits associated with—and is sustainable because of—the economic efficiency that goes along with fuel efficiency. So, this is an ongoing relationship which is bearing some very important fruit.

Senator SARBANES. I see my time is up. I gather these programs are very much sought out on the Indian side. It is my understanding that they really want these programs. I take it they are also sought by American business.

Ms. BABBITT. Yes. We have been provided a little bit of a match-making facility but they are eager participants. We have not had to work to create interest on either side once the elements of the benefits were evident, and they certainly are to both American industry that senses the market and an opportunity to do the right thing in terms of the global climate issues and also with respect to the Indian industry which sees the opportunity to compete better because of the more efficient fuel use and help with their respective health issues as well.

Senator SARBANES. Thank you.

Senator HAGEL. Senator, thank you.

Staying on point, Madam Administrator, with the Indian projects, as you know, May 27 of this year the committee received notification from AID regarding three climate change projects in India. According to that notification, the trade in environmental services and technology test project is designed to support pilot projects in industry sectors. According to AID's further description of the project, the test project will examine the cost effectiveness of voluntary pilot carbon emissions trading within India in targeted industrial sectors. The program is intended to use market based instruments as a tool for improving the energy efficiency production.

Now, with that as a base, I would like to ask a couple of questions. Actually going back for a moment to what Senator Sarbanes was referencing, regarding the protocol, self-interest of nations, most specifically nations that you mentioned, China and India being the two which will soon be in the largest manmade greenhouse gas emitters category, has India, to your knowledge, demonstrated any intention of taking on binding obligations which obviously, as you know, is prescribed in the Kyoto Protocol and the main reason, as Senator Sarbanes referenced, the Senate passed 95 to 0 the Byrd-Hagel resolution which said that the United States would not bind itself to a treaty or a protocol unless all nations, but in particular India, for example, would do that? Have you sensed any change of heart with India that they are rushing forward to bind themselves to Kyoto standards?

Ms. BABBITT. Senator, I have not been involved directly with the negotiations, but I have heard nothing that would indicate that India was moving forward with respect to voluntarily assuming a binding commitment.

Senator HAGEL. Mr. Hales, is there anything that you want to add to that?

Mr. HALES. No.

Senator HAGEL. That is rather discouraging, would you not say?

Ms. BABBITT. Senator, this protocol is a work in progress. We feel that the work we do is very much in the nature of promoting the goals of Byrd-Hagel, that is, in promoting the greater participation of developing countries in this clearly worldwide global issue. The mechanisms under Kyoto were left undefined and unelaborated. We believe that some of our work contributes to the further elaboration and strengthening of Kyoto, but it is a work in progress certainly.

Senator HAGEL. Do you believe that we could ever go forward realistically with the Kyoto Protocol unless you get India and China, for example, to bind themselves to those protocols and those commitments?

Ms. BABBITT. Those kinds of decisions are certainly above my pay grade, but I would certainly recognize the sense of the Senator's question which is that India is currently the world's sixth largest emitter of greenhouse gases and the second fastest growing emitter. The solution to the greenhouse gas emissions issue is one that would need to include the large contributors to the problem.

Senator HAGEL. You see, part of the concern that many of us have up here has nothing to do, first of all, with whether we support AID. In any case, you know I am a strong supporter of your

organization. I think most of us up here are strong supporters of environmental efforts, energy efficiencies.

But as we frame this up in the real world, we step back and we look at the commitment that the United States would have to take on, moving 7 percent below 1990 levels, when in fact the rest of these nations would be essentially held harmless, and then we are paying for their progress on different programs like what you are doing, what other organizations are doing. It gets to a point where it certainly goes beyond a cost-benefit analysis for the United States. Are we in fact undermining our own competitiveness in the world? And in the end, India, China, other nations probably will not take on mandatory binding obligations.

So, if you are not aware of some of the sense up here, Administrator Babbitt, I wanted to kind of frame that up as to why many of us are concerned about this. I know you have other things to do, as I do, so this is not just an exercise in "let us have another hearing" when we ask you to come up and talk about these things. You know these are serious things and I wanted you to understand a little bit of the perspective on where some of us come from on this.

Staying with the subject, focus on this May 27 notification and tying a little bit back to what Senator Sarbanes said, what you have said, and I think the general consensus up here that AID is a very important organization, AID, and rightfully so I believe, continually notes its concern regarding the reductions in the development assistance account of AID. But when I asked for your budget the other day to review it again, I noted—and you can correct me here, obviously as you will if I am wrong—in your fiscal year 2000 request that the development assistance account—you have a request for \$780 million versus \$1.19 billion that you had in fiscal year 1999. My understanding is that some of these programs that we are talking about today are being funded through or money taken away from the development assistance account.

Could you clarify that? Is that not true, or maybe to start with, why is that development assistance account less, what you are asking for in fiscal year 2000?

Ms. BABBITT. Senator, that is I believe a function of the account having been divided into one account for child survival and disease and two other development assistance [DA] accounts.

Senator HAGEL. So, no environmental programs are being funded out of development assistance.

Ms. BABBITT. Oh, no, they are. They are. I am sorry. I misunderstood your question. I thought your question was why has the request gone down so much from 1999 to the year 2000. My answer, if that were the question, would have been it has not. In 1999 there are two DA accounts, but FY 2000 is now broken up into one child survival account and two DA accounts, and the total is slightly larger, I believe, for fiscal year 2000.

Senator HAGEL. For the child survival. Well, actually it is a little less in the account that I am looking at.

But let me ask it a different way then. Are the numbers that are coming out of the development assistance account dramatically different for fiscal year 2000 in using moneys out of that account for these environmental programs versus what you had been doing?

Ms. BABBITT. I do not believe so, sir. I believe that the environmental levels are roughly \$270 million both years. Now, I would have to look at the figures to be able to verify them exactly, but I believe it is roughly \$270 million each year.

Senator HAGEL. We have the exact account here, and if there is any change to that, you can supply that for the record.

[The following response was received subsequent to the hearing.]

USAID FY 1999 AND FY 2000 DEVELOPMENT ASSISTANCE ACCOUNTS

In FY 1999, USAID has two development assistance program accounts: the Development Programs account with a level of \$1.194 billion, as Senator Hagel has noted, and the Child Survival and Disease Programs account at \$595 million (including \$50 million of emergency supplemental funds and excluding \$105 million directed for UNICEF). These two accounts total \$1.789 billion.

The FY 2000 request includes three development assistance accounts. The Development Programs account at \$780.4 million and the Development Fund for Africa at \$512.6 million total \$1.293 billion; this is the equivalent of the FY 1999 level of \$1.194 billion—that is, in FY 1999 African development programs are being funded out of the regular Development Programs account. The Child Survival and Disease Programs account, originally requested at \$555 million, was recently adjusted to \$600 million as part of the President's new AIDS Initiative. Adding in the Child Survival request brings the total requested for the three accounts to \$1.893 billion that compares to the FY 1999 appropriated total of \$1.789 billion.

Finally, to clarify the record with regard to funding for environment programs, USAID will allocate approximately \$255 million in FY 1999, and intends to provide \$290 million for environment programs in FY 2000, from development assistance accounts (no funding for these programs comes from the Child Survival and Disease account).

Senator HAGEL. Another program on India that AID notified the committee of its intent to fund is the Energy Conservation and Commercialization program, I think referred to as ECCO. That program, which also uses development assistance funds will provide technical assistance for an electric vehicle program for two or three-wheelers. Are you kind of with me on this?

Ms. BABBITT. Yes.

Senator HAGEL. OK. A couple questions on that. I suspect, as you know, electric vehicles have had a difficult time with their development, even in the sophisticated U.S. market because of high cost, limited range, long recharging times, and other difficulties. In contrast, most automotive manufacturers believe now that fuel cells have the most significant potential to offer a zero emission vehicle without most of the limitations of electric vehicles.

Now, if you accept that—and I do—why is AID concentrating on electric vehicle research in this proposed grant?

Ms. BABBITT. I am the one who you called to testify, so I am going to give you as much information as I can on this, and then if David has some more, ask him to fill in the blanks.

My understanding, both from spending too much time in traffic on the streets of New Delhi and from some of the information I have received from our folks, is that a large percentage of the traffic in the metropolitan and the urban areas in India are these two-stroke vehicles, which are notoriously fuel inefficient. They also represent vehicles that only go short distances in an urban environment. So, that particular configuration makes electrical vehicles more applicable than they would be in a rural environment or if they were replacing already energy efficient vehicles.

There is a great incentive, which is relatively new in India, to upgrade or to decrease the polluting aspects of these vehicles. There are new regulations in place, new laws in place, and a rising consciousness in the Indian public about the dangers of the pollution from these two-stroke vehicles which may combine to make the electrical vehicle in this context a winning combination.

David is just back from India and I think is more personally familiar with this project. So, if it would be all right——

Senator HAGEL. Sure, Mr. Hales.

Ms. BABBITT [continuing]. I would like for him to expand on that.

Mr. HALES. Thank you, Chairman.

Hattie I think has captured the essential differences between a market for electric vehicles in India, say, and a market for electric vehicles in Chicago or Miami. Essentially what we are looking at there is a situation where almost 70 percent of the pollution that we are dealing with in major urban areas comes from those two-stroke vehicles. They are used for very short hauls. They are used at a very low speed. So, they are, both in terms of range and in terms of power, within the capacity of existing storage batteries.

In addition, there is another substantial advantage for India in that the actual recharge of those batteries provides them with an additional use, a very effective use for off-peak power. So, there are a number of technical issues or contextual issues which makes this worth taking a close look at in India.

In addition, as the Administrator pointed out, there is a very strong growing awareness, including on the part of the manufacturer who dominates the market for two- and three-wheeled vehicles in India, of a social responsibility to take part in reducing local health impacts that are associated with this. In many ways, it is the leadership from Bajaj Motors that is driving this project.

Our role with it is simply—Bajaj is funding all of their activities. We are not subsidizing an Indian motor company, but what we are trying to do is help U.S. technology suppliers be engaged in the research and development that Bajaj is using to try to move to an electric vehicle that would meet India's needs.

Senator HAGEL. Well, I just say I think those are very credible explanations. Most of the manufacturers who are going to, obviously, have much to say about the future of this, as you know, have moved rather significantly to fuel cell technology. I am not aware of any who are now really focused on the electric piece of this partly because the cost still cannot get down into a range that is usable essentially and achievable for what we need to do with them, and India being a good area to test these things and your answers are exactly right. Their world is a little different, obviously. But still it is the cost and it is where the new technology is going, and it is not going in the area of the electric car.

We have been joined by our colleague, Senator Kerry. Senator Kerry, welcome.

Senator KERRY. Mr. Chairman, thank you.

You have already had——

Senator SARBANES. I already had a round.

Senator KERRY. I know that the chairman, whom I respect and is a good friend of mine, has great qualms about global warming and Kyoto and the protocol, and seems to be the most vigilant

Member of the Senate in trying to make certain that we are not implementing it somehow surreptitiously or otherwise. I look forward to the day that we have persuaded him of the efficiency of emissions trading and of the importance of people's concerns about this on a global basis, and I really do look forward to his participation in the long run in what I think is an important effort.

But let me just say for the record here I just this year chaired, in concert with the World Bank—and I thank Jim Wolfensohn for his vision on this—a conference in Vietnam with many of the donor countries in Asia regarding environmental development practices. All of these countries have enormous choices in front of them. Guangdong Province in China has two water treatment facilities for the entire province, one of the fastest growing regions in all of China. They are in desperate need of technological assistance. Anyone who has traveled abroad—and I know my colleague has—you can see the pollution rising from the streets of Bangkok and Shanghai and various places. It is hard to breathe. Most of us who have been there have been happy to leave not because we do not like the place, but because it is a relief for our systems just to be able to get out and breathe again.

The problems of development in these countries undergoing fast economic development are just enormous. As a country that turned the corner on leaded gas and turned the corner on emissions controls and are still fighting with our own SUV standards and other issues—the United States should be sharing this information and these technologies with these countries so they do not repeat the mistakes we have made, so they do not contribute to bad air, bad water, bad forestry practices, and a host of other things is just incomprehensible to me. I think we have got to be really careful, Mr. Chairman, that we do not have a chilling effect on the willingness and capacity of our agencies to engage in salutary, proactive efforts to try to help other nations resolve these problems.

Moreover, let me just say, as the ranking member of the Small Business Committee, there is a \$280 billion market for environmental technologies out there and we only have 6 percent of it.

In 1980 when President Reagan came in, the immediate impulse was to pull away from some of the environmental research in the country. So, they took away what President Carter had created in the Energy Institute out in Colorado, which had then transferred professors who had been tenured at various colleges and universities who had gone out there, given up their tenure to become part of the great research effort for new energy in America. We were the world's leader in photovoltaics and renewables, and they completely cut the guts out from that Federally supported research.

What happened is, in the ensuing years the Japanese and the Germans replaced us as the leaders in those technologies. And when the former Communist bloc countries fell, you could go to places like Prague or other places in the Czech Republic, or in Hungary where there were no living bushes within 50 miles of the energy plants that they had there because of their emissions. You could feel ash on the ground and so forth; the Danube River, completely polluted, dead. And they were seeking to undo the effects of the 70 years of Communist rule, and where did they go for the technologies? They went to Japan and they went to Germany, not

the United States anymore because we were no longer the leader. So, we lost a lot of business.

I think we have to think about this in a very proactive and intelligent way, and I beg my colleagues on the other side of the aisle to review some of the evidence. They may not like the methodologies chosen, and they may not like the protocol for various and sundry reasons, but that does not mean that we should turn our back on the realities of the science and certainly practices that we ourselves have learned are inefficient.

Yesterday we had a debate on the Senate floor about the cleanup impact of mining, which has left us with \$32 to \$72 billion worth of cleanup, some 59 Superfund sites, some 12,000 rivers and streams destroyed. So here we are still struggling in our own country with development practices.

I think what the Administrator is doing, what AID is doing is completely consistent with the Framework Convention that was passed by the U.S. Senate in 1992, which calls on us to share technology and information with other countries. And it is completely inconsistent in my judgment with the notion underlying the chairman's joint resolution with Senator Byrd, which I was very involved in as the manager on the other side on the Senate floor, not to be reaching out to the less developed countries to bring them into a broad, global participatory effort on the environment and development. I think we have everything to gain and nothing to lose.

I share with the chairman the notion that it is inconsistent to have some kind of an international effort that does not require participation by less developed countries. Clearly, the more advanced developing countries, Mexico, Korea, China, India, et cetera, are at a threshold level where if they are left outside of participation, they will undo everything we do. We understand that. So, we must have their participation.

But I wish we were working in a concerted effort to try to make it happen rather than this halting, somewhat suspicious and divided effort that seems to not reach to the best interests of the country and I think in the long run our global interests.

I am not going to ask any questions. I assume the record would stay open. But I did want to make a statement. I did want to stop by because I think it is terribly important for us to be approaching this thoughtfully. And I thank the chair.

Senator HAGEL. Senator Kerry, thank you.

Senator Sarbanes.

Senator SARBANES. I want to make one clarification. Some of the previous questioning seemed to suggest that the money committed for these various energy conservation and commercialization programs was being taken away from development assistance. My understanding is that these energy efficient programs have always been a part of development assistance. In other words, it has been treated by AID historically and traditionally as part of the development assistance package. You made reference earlier to sustainable development.

I also have information which suggests that the ratio being committed to the environmental area within the development assistance program has not changed in any marked degree. Is that correct?

Ms. BABBITT. Senator, we have long viewed the climate change and environment aspect of our portfolio, of our objectives as part and parcel of the sustainable development mandate that we have. If I can—

Senator SARBANES. You listed on your report that funding for these programs comes out of the appropriation category for development assistance. It's my understanding that it always comes out of this category because it has always been part and parcel of development assistance. Is that not correct?

Ms. BABBITT. Yes, sir. If I can give you an example with respect to that. We have a forestry program in the Congo. The forestry program in the Congo touches a variety of different goals. On one level, the economic development level, it provides for sustainable timber production. On another level, it is watershed management, and on a third climate related level, it provides for sequestration with respect to the climate change agenda. So, it would always be our intention that our climate change related programs fit within the broad development mandate which is the essence of what we do.

Senator SARBANES. I am going to harken back to the trip I made with Daley. This trip had an impact on my thinking, because it was the first time I had been to India. At this time, several American companies were interested in entering the Indian power sector. They have a tremendous need for power. In many of the urban areas, there are frequent brownouts and electricity is put on a rolling basis. They are quite anxious to have our involvement, and we are quite anxious to be involved. But, there are problems.

I want to read one paragraph out of a summary the Energy Conservation and Commercialization program:

State Level Electricity Regulatory Commissions: At the state policy level, reforms will provide an opportunity to incorporate market-based incentives into newly restructured electric utilities and in the policies of the independent commissions that will regulate them. Creation of electricity regulatory commissions throughout the country presents USAID with the opportunity to support and train a new cadre of regulators in market oriented electricity regulation and incorporation of energy efficiency policies. These regulatory commissions will be crucial steps in helping to assure a "fair playing field" and commercial rule of law for U.S. and other private investments in the Indian power sector.

Every American company that was with us on that trade mission—a number of which were interested in the power sector—underscored how important it was to establish a fair playing field and to have a commercial rule of law that governed American investment and other private investment. They were interested in exploring the Indian power sector. The Indians were interested in bringing them in but American companies asked if some preconditions or basic requirements such as commercial rule of law could be established.

This seems to me to be an extraordinarily worthwhile effort that you are undertaking. I want to commend you. I think this is a terrific activity, and think it will serve well your sustainable development goals abroad. It will certainly serve well the American industry interested in participating in this effort, whereas making a contribution on the one hand to sustainable development, while gaining an economic benefit on the other.

I am not asking a question. I am really making a statement. My sense in reading over these Indian programs is that they have been well thought through and arrived at carefully. I must say I am solidified in that view by the response you both gave to the chairman's question about the automobiles and the fuel cells. When I first heard him ask the question, I wondered to myself, why are they doing that? When I heard your response, which I thought was forthcoming and dealt directly with the concerns that the chairman put forward, it seemed to me your reasoning was more than an adequate. You are dealing with a situation that is affecting people's judgments.

Whether in the end these measures will prove successful, I do not know. It certainly seems to make sense that you explore these possibilities. The circumstances of the situation in India lend themselves to going down the path with that technology. In any event, it seemed to me rather clear that you have not made a half-baked judgment without careful analysis.

I have the same reaction to the proposals we have been looking at today. So, I just wanted to make that point.

Senator HAGEL. Thank you, Senator.

Could I ask a couple of procedural questions? At AID who determines the appropriate technologies as you develop these programs, to advance the appropriate technologies through these projects? Do you get that expertise inside? Do you go outside? How is it done?

Ms. BABBITT. If I can address it in a general way, we do both. We have some very talented folks within the Agency, but we do not have the depth in every single issue that we cover, of course. So, we often rely on assistance from without the Agency to determine that.

Mr. HALES. I would add to that, Senator, only that we also have a great deal of help from our partners in developing countries. In India, for example, there is a very, very sophisticated scientific community, academic community, and a very sophisticated corporate leadership in India, and it is in close partnership with them, with folks inside the Agency, and with other areas of expertise, various universities in the United States, think tanks, and our own corporations that we try to evaluate which technologies would be the most appropriate in a given situation.

Senator HAGEL. Yes. Do you want to add something further?

Ms. BABBITT. I did not want to add to that. I did want to go back to the fuel cells issue, when it is appropriate.

Senator HAGEL. Yes. Go right ahead.

Ms. BABBITT. Part of this back and forth has been for me to satisfy myself that the examination of the new technology with respect to fuel cells is already part of the plan with respect to the congressional notification.

Senator HAGEL. Part of your plan within AID working with electric car technology.

Ms. BABBITT. Yes. I did not want to represent that it was already part of the plan, but we do recognize the fuel cell as an important clean energy technology. And we will help Indian agencies assess the applicability of fuel cells as well. My point is that, although we feel for the reasons both David and I have testified that the electrical vehicle is potentially a viable one potentially because of the

short distances and the slow speeds at which the two-stroke vehicles travel, that is not to discard fuel cells as a possibly useful technology, and that is part of the plan under the CN which we have already submitted to the Congress.

Senator HAGEL. Thank you.

In response to a question I had submitted earlier—actually it was the second hearing when we had David Sandalow here—he stated in response to that question that EPA had provided \$500,000 to Argentina's Department of National Resources and Sustainable Development with a commitment for an additional \$200,000 in connection with Argentina's commitment to announce an emissions target at the fifth meeting of the U.N. Climate Change Convention Conference of the Parties. Would that be something that you would work with or did work with Sandalow and his agency on in coordinating that outside money, program?

Ms. BABBITT. I am not familiar with what EPA did, but we do not have a mission in Argentina and I do not believe we are involved in anything related to Argentina with respect to that meeting. Well, in Argentina, but with respect to the issue that you raise.

Senator HAGEL. OK. So, you were not consulted on the EPA grant to Argentina. This is not a trick question, by the way.

Ms. BABBITT. What does "consulted" mean?

Senator HAGEL. But if you find out differently, supply that as well, if you would, Mr. Hales.

Mr. HALES. If I might, Senator. The interagency team that works on all of the climate change issues is pretty generally aware of what each of the agencies are doing, and in that sense I think we are all consulted about what all of the other agencies are doing. But Argentina is not a USAID country and we have neither direct technical expertise nor funding in that program.

Senator HAGEL. Another India project that I do not believe has come up specifically yet today. It includes an ongoing \$193,400 grant to the Tata Energy Resource Institute which supports 70 percent of the time of a visiting fellow in India from November 1998 to January 2000. Are you familiar with that grant, generally with that project?

Ms. BABBITT. I am familiar. I believe this is the Katie McGinty issue.

Senator HAGEL. Yes.

Ms. BABBITT. I understand that Katie and her husband Carl are working in India on global climate change issues. I was one of the participants along with many other U.S. Government and U.S. business participants in a conference that she helped organize in May, but I frankly am not familiar with her exact relationship with USAID in that so that I would need to get back to you on any details with respect to the relationship.

Senator HAGEL. Well, that is exactly my question. What does she do? What activities are involved with that grant?

Ms. BABBITT. I can address the activities with which I am familiar which focus on the U.S.-Indo business dialog in May. I believe she was instrumental in setting that dialog up. It occurred in Washington. A number of us spoke, Larry Summers, Frank Loy, a

number of the members of the administration, and a number of the members of the Indian business community.

Senator HAGEL. Would this be a one-time kind of grant? For example, is there any history? In 1998 would this kind of a grant have been used?

Ms. BABBITT. It is my understanding that Katie's engagement in this is from some time during the end of 1998 through the end of 1999. I am confident that her engagement is broader than simply this one U.S.-Indo dialog, but I am not able to detail what her activities are.

Mr. HALES. Just to say, Senator, that the relationship with the Tata Institute is a longstanding one, and it has a number of facets to it. Certainly those kinds of activities and that engagement have taken place. I cannot tell you exactly how long. We could certainly give you a history of that engagement.

The broad purpose of the kinds of activities we are dealing with here are to help make it very clear that activities which reduce greenhouse gas emissions are not always uneconomic activities. In fact, there can be substantial economic benefit from that. Many developing countries are quite afraid that if they take actions to reduce greenhouse gases, that that will somehow cause an adverse economic effect, and there is substantial conviction in the Indian scientific community and among the Indian business leadership that in fact there are opportunities present in the efforts to reduce greenhouse gas emissions, as well as local pollution. The work with Tata helps to try to demonstrate that in a wide range of ways, but we could certainly provide you with detail of the history of that if you would like.

Senator HAGEL. Well, that would be helpful. I appreciate it. Also, if you could include in that answer what it is that Ms. McGinty is doing on this project, what her activities are as well.

Ms. BABBITT. Certainly.

Senator HAGEL. I appreciate that.

[The following response was received subsequent to the hearing.]

USAID'S RELATIONSHIP WITH TATA ENERGY RESEARCH INSTITUTE (TERI)

The Tata Energy Research Institute (TERI) is an autonomous, not-for-profit research institute established in 1974 with core funding from an endowment from private sources. TERI conducts scientific and policy research in energy, environment, biotechnology, forestry and related sustainable development issues. TERI has a strong record in India as an independent policy research organization in energy and has been able to mobilize attention to environmental issues among Indian decision-makers. TERI also has a branch office in Washington, D.C., TERI North America.

USAID has a long history of collaboration with TERI as a grantee and partner. For the past decade, USAID and TERI have worked together on several activities, including the following:

- Under USAID/India's Program for Acceleration of Commercial Energy Research (PACER), TERI conducted studies from February 1989 to October 1990 in order to identify possible technologies and private or public sector sponsors in India eligible for funding under the PACER Project.
- From January to June 1993, USAID/W provided funding to TERI for establishment of the Asian Center for Energy Efficiency and Demand-Side Management (ASCEND) for the purpose of promoting greater investments in energy efficiency and demand side management.
- In June 1994, USAID/W funded a TERI workshop on the concepts of Integrated Resource Planning and Demand Side Management as an alternative to increasing power generation capacity. Indian power sector policy makers, financial in-

stitutions, state electricity board officials, and the private sector attended the workshop.

- In July 1996, USAID partially funded a TERI Program on Energy, Environment, Resources and Sustainability (PEERS) that identified probable future public and private sector leaders, and trained them on sustainable environmental issues.
- TERI has been surveying industrial environmental management as part of a USAID/India program on clean technology; the survey concluded in September 1999.
- Several staff members of TERI have received USAID-funded training in the U.S. on various energy and environmental issues, most recently training of two TERI researchers in the use of state-of-the-art climate change policy models.
- USAID provided funding to TERI in November 1998 to cosponsor an international symposium on renewable energy in association with the International Society for Renewable Energy Education.
- USAID provided support from March 1998 to February 1999 for TERI to write a manual on solar photovoltaic technology.
- From FY 1995 to FY 1997, USAID funded a cooperative program with TERI. The U.S. Department of Energy collaborated in the program. The program promoted and supported policy and strategy development related to energy efficiency and environmental improvement, and fostered technology relationships between the U.S. Electric Power Research Institute (EPRI) and related energy and environmental organizations in Asia. EPRI also established an industrial technology transfer program in India.
- For the last five years, the U.S.-Asia Environmental Partnership (US-AEP) has periodically funded joint activities with TERI. US-AEP contributed funding to the program described above, and supports a current relationship with the International City Managers Association (ICMA) to provide consultant services for activities of mutual interest. Joint activities of US-AEP and TERI have included environmental policy analysis and conferences promoting improved urban and industrial environmental management.
- In FY 1999, USAID/India awarded a grant to TERI North America to support 70% of the time of a Visiting Senior Fellow, Ms. Katie McGinty, in India from November 1998 until January 2000. Ms. McGinty is a former chair of the President's Council on Environmental Quality. This grant came from USAID's Greenhouse Gas Pollution Prevention Project, as part of the Outreach and Awareness activity. The objective of the grant is to increase awareness among the Indian public and private sectors on global climate change issues facing India and the world, and to identify opportunities for addressing processes that result in environmental degradation or enhancement. As part of this objective, the grant is also helping build partnerships between U.S. and Indian businesses and industries to examine opportunities and challenges arising from global climate change mitigation.

KATIE MCGINTY'S ACTIVITIES IN INDIA

Ms. Katie McGinty, a former chair of the President's Council on Environmental Quality (1993–1997), is currently a Senior Visiting Fellow at TERI under a partially USAID-funded fellowship (70%). Her role at TERI is to increase awareness among the Indian government, NGOs and businesses on the linkages between greenhouse gas emissions reduction and sustainable development. The objective is to help increase their participation in reducing India's greenhouse gas emissions. Ms. McGinty has carried out the following work:

- Organized a series of meetings with the Indian power sector, Indian businesses, and Indian government officials to explore their understanding of the linkages between environmental issues such as climate change and local development. She found that the Indian business community had the most interest in reducing emissions via access to U.S. technologies and financing that could benefit from the use of market-based mechanisms.
- Participated in a series of workshops conducted by the Confederation of Indian Industry (CII) on greenhouse gas emissions. CII is one of the USAID local partners under "Climate Change Outreach and Awareness" activity of the Greenhouse Gas Pollution Prevention Project.
- Participated in U.S. Information Service (USIS) events on climate change, including a lecture series involving U.S. representatives from Enron and Dupont discussing cost-effective approaches to achieving highest levels of efficiency in reducing greenhouse gases. She will participate in similar USIS events this fall.

- Helped the Confederation of Indian Industry (CII) coordinate and plan a dialogue with U.S. businesses in Washington D.C. in May 1999 to discuss the possibility of Indian and U.S. businesses working collaboratively on climate change opportunities and challenges.

Senator HAGEL. Let me get back to a point I made earlier in my opening remarks about emissions trading projects. There is an awful lot of confusion about what they are and what they would do and the value and in fact would they work without the Kyoto Protocol, what is the value for an American company. My friend, John Kerry, talked a little bit about technology, and I share those concerns, although I do not think America is about ready to run out of leadership ability and quantity and quality in this business if we do not do something in regard to the Kyoto Protocol. I have a little difference of opinion with my colleague on the issue of voluntary versus mandatory, and that is where the difference really resides, not that we both do not accept responsibility for each of us and our country to deal with the environmental issues worldwide. That is not the issue, never has been. It is about how we do it.

But emissions trading systems only work in a global context if you have enough emission grants to go around. I would be interested in—take any dynamic of this you wish, Madam Administrator—your evaluation and perspective on emissions trading systems. We talked about Ukraine, for example. How do they work in your opinion if you do not complete the Kyoto Protocol? What is the value to an American company if they do not have something to trade, if there is no value? If Russia does not participate, for example, or China does not participate, then where do you get enough of those credits to make it worthwhile for an American company?

And then I guess the other part of that would be can or should emissions trading systems work without a mandatory type of a protocol called for like in the Kyoto Protocol? And take any piece of that you wish.

Ms. BABBITT. Well, I am not sure I am going to answer this in the most important aspect first, but let me just take pieces of it.

The administration—and I do not want to state this too many times—has made it clear to those of us in the administration that it has no intention of submitting this treaty for ratification before there is participation by the developing countries and that we see this Kyoto Protocol as very much a work in progress.

The efforts which we make with respect to these emission trading systems with developing countries, which is USAID's niche in this larger issue, is to try to strengthen and elaborate on the Kyoto mechanisms in a way to make sure that, as this work in progress progresses, the mechanisms are elaborated upon and strengthened in a way which best suits United States business interests, environmental interests, and governmental interests.

The Clean Air Act in the United States is an emissions trading system with respect to SO₂. We have that kind of experience in the United States with an emissions trading system that works. It is still very complicated stuff. There are still a lot of people, including me, who do not understand it particularly well. But we have a basis upon which to understand how a system like this might work.

The breadth and depth of understanding of a potential emissions trading system and how Kyoto mechanisms might work in develop-

ing countries is much less well defined and understood. It is our intention, to the extent that our programs address this band of issues, to help with the understanding in developing countries of how these mechanisms could work to their benefit. And when I say work to their benefit, I mean not just in the emissions trading narrow sense, but in the sense that if a system like this were developed to fruition, it would provide an opportunity for new resources for developing countries. That is to say, developed countries could, under some later agreed upon set of mechanisms, provide resources to developing countries for energy efficient projects. By resources I mean money. And it could also provide technical capacity that they do not have. So, the development benefits of a developed emissions trading system like the Clean Development Mechanism could be an enormous boost to developing countries both from a resource standpoint and from a technology standpoint.

Now, as David pointed out a little bit earlier, most—I think “most” is the right way to characterize this—developing countries are fearful of this whole subject because their instinct is to see it as a sort of developed versus developing country kind of phenomenon. We do not believe that is the case. We believe that, properly developed, these trading systems, the Clean Development Mechanism, for example, could be an enormous source of resources and technology for developing countries.

It cannot be, as you have pointed out in both your opening statement and since then, a system which we can join unless developing countries participate. So, there is a lot of incentive to work toward elaborating and refining these systems, these mechanisms under Kyoto in a way which is supportive of U.S. interests. We are not there yet, but the potential benefit is an enormous one and a worthy one we believe.

Senator HAGEL. Do you believe that is part of the AID mission statement?

Ms. BABBITT. We believe that the sustainable development mission statement of USAID includes trying to minimize those aspects of climate change which undermine the economic development mission statement that we have. Senator Sarbanes’ example demonstrates, at least as clearly as any I can think of, the pollution aspects of inefficient energy use, and the damage to health clearly undermines our sustainable development goals.

Or in the Congo example I used earlier, the failure to manage forestry resources undermines sustainable timber development. It also undermines watershed management, and it also gets rid of what could be a potential sink for greenhouse gases. So, we really believe very firmly that these issues are united.

Senator HAGEL. Thank you.

Senator Sarbanes.

Senator SARBANES. I have nothing further.

Senator HAGEL. Well, again thank you, Madam Administrator, for coming up this afternoon. We will keep the record open. Our colleagues may have questions, and we will get those to you by the end of the week if there are further questions to be answered for the record. Again, I appreciate what you are doing, and thank you for coming up.

Ms. BABBITT. Senator, I very much appreciate the opportunity to be here. I appreciate your permitting David to fill in the blanks. I have a very large portfolio. This environment one is his, and I knew he would have details that would be helpful. Thank you.

Senator HAGEL. Well, I think you did just fine, but we are always pleased to see Mr. Hales. He adds a very exciting dynamic to the hearings.

Thank you.

[Whereupon, at 3:32 p.m., the subcommittee was adjourned.]

Additional Questions and Responses for the Record

RESPONSES OF DEPUTY ADMINISTRATOR HATTIE BABBITT TO ADDITIONAL QUESTIONS SUBMITTED BY SENATOR HAGEL

Question 1a. As was discussed during the hearing last week, in USAID notification of climate projects, there were references to the USAID climate agenda. Please provide the following:

—Documentation describing this agenda and all programs and initiatives related to it, including descriptions and justifications for funding consistent with the Government Performance and Results Act.

Answer. Since 1994, USAID has consistently assisted developing countries to address climate change through energy efficiency, renewable energy, forestry, and urban sector activities. Key elements of the Agency's climate change strategy have been to promote policy reform and privatization, build indigenous capacity to address climate change concerns, demonstrate proven U.S. technologies that reduce greenhouse gases, and encourage climate-friendly investment. These activities have generally endorsed the successful U.S. approach of using market mechanisms to promote environmental protection.

In 1997, prior to the Fourth Conference of the Parties in Kyoto, Japan, the Agency launched its \$1 billion, 5-year Climate Change Initiative. The Initiative proposed to build upon the successes of previous climate-related assistance, with special emphasis on twelve key countries and regions. Guided by the goals of the UN Framework Convention on Climate Change (FCCC), the Initiative is focused on three primary objectives:

- Decreasing the rate of growth in net greenhouse gas emissions;
- Increasing developing and transition country participation in the goals of the Convention; and
- Decreasing vulnerability to threats posed by climate change. A copy of the Climate Change Initiative (1998–2002) is attached for your reference.

Monitoring and measuring the results achieved through its programs is among the Agency's highest priorities. Under the Initiative, the Agency makes a concerted effort to measure the impact of programs, assess the most effective strategies for combating the threat of climate change, and continue to improve and focus the Agency's approach.

The Agency established performance indicators to track progress across a range of sectors and activities. Also attached are results reported for FY 1998 under the Climate Change Initiative. These were reported in the climate change annexes to the Results Review and Resource Request (R4) submissions. The R4s provide the basis for the Agency's Annual Performance Report and the Congressional Presentation, which fulfill USAID's reporting requirements under the Government Performance and Results Act.

Attachments:¹ USAID's Climate Change Initiative, 1998–2002. FY 1998 R4 Submissions: Climate Change Annexes.

Question 1b. As was discussed during the hearing last week, in AID notification of climate projects, there were references to the USAID "climate agenda." Please provide the following:

—Documentation that identifies changes in the scope and funding for these programs for fiscal years 1997, 1998, 1999, and proposed 2000.

Answer. Speaking at the United Nations (UN) General Assembly Special Session on Environment in June 1997, President Clinton announced that the United States

¹ COMMITTEE NOTE: Attachments referred to throughout are in the committee's files.

would provide \$1 billion over five years to collaborate with developing nations and countries in transition in reducing the threat of climate change. USAID was charged with implementation of the President's commitment to these countries. The Agency proposed to meet this commitment with a minimum of \$750 million in grant assistance and up to \$250 million in climate-friendly investments stimulated through the use of credit instruments during FYs 1998–2002.

USAID's climate change strategy, drafted in 1994 in response to Congressional request and revised in 1997 to target twelve key countries and regions, implements a "no-regrets" approach to climate-related intervention.² "No regrets" refers to activities that provide climate change benefits in addition to their primary objectives of increased energy efficiency, cleaner energy production, more effective natural resource management and reduced urban pollution. This focus has been the mainstay of USAID's climate change program since its inception. By addressing climate change in conjunction with sector-specific and economic development goals, USAID leverages existing resources and assures a greater level of sustainability.

USAID grant assistance for climate-related activities from fiscal year 1997 through proposed 2000 has remained steady at an average of just over \$150 million a year. The annual breakdown of climate related funding for the past several years follows:

FY 1993: \$199.1 million (actual)
 FY 1994: \$172.1 million (actual)
 FY 1995: \$191.7 million (actual)
 FY 1996: \$174.2 million (actual)
 FY 1997: \$147 million (actual)
 FY 1998: \$163 million (actual)
 FY 1999: \$150 million (estimate)
 FY 2000: \$150 million (proposed)

Question 1c. As was discussed during the hearing last week, in AID notification of climate projects, there were references to the USAID "climate agenda." Please provide the following:

—An annotated copy of President Clinton's April 20, 1999 submittal to Congress in accordance with Section 573 of the Foreign Operations, Export Financing, and Related Programs Appropriations Act, 1999 (P.L. 105–227) that indicates where your "Climate Agenda" is discussed.

Answer. A copy of the Report to Congress on Federal Climate Change Expenditures is attached. This report, compiled by the Office of Management and Budget (OMB), details actual and proposed funding levels for USAID's climate change activities, provides a brief overview of the Agency's climate-related activities, and gives examples of intended results. Text relating to USAID programs is flagged.

Attachment: Report to Congress on Federal Climate Change Expenditures. Office of Management and Budget (OMB).

Question 2a. During the hearing, you testified that India was the sixth largest emitter of greenhouse gas and was the second fastest growing emitter. Please provide the following information:

—The list of the top ten developing countries ranked by emissions. Also, please provide the most current actual emissions, the projected rate of growth, and the projected emissions for the years 2010, 2015, and 2020.

Answer. Under the Climate Change Initiative, USAID sponsors climate related activities in forty-four countries. However, the Agency concentrates resources on 12 priority countries and regions, selected because of their current and predicted contribution to net global greenhouse gas emissions and/or their governments' receptivity to taking concrete action. Of the ten largest greenhouse gas emitters among developing countries and countries with economies in transition, seven are USAID key countries. Three are countries in which USAID does not have a presence: People's Republic of China, Republic of Korea, and Saudi Arabia. The following table indicates the top ten developing country greenhouse gas emitters, according to the International Energy Association (IEA). India, the sixth largest emitter of greenhouse gases overall, is the third largest emitter among these countries.

With respect to projected rates of growth and projected emissions for the years 2010, 2015, and 2020 for these top emitters, standardized projections are not currently available through the UN Framework Convention on Climate Change (FCCC) Secretariat. Some organizations attempt to project future emissions for various

² Key countries/regions are: Brazil, Central Africa, Central America, Central Asia, India, Indonesia, Mexico, Philippines, Poland, Russia, South Africa, and Ukraine.

countries, but these estimates are speculative. The attached table from the IEA contains emissions projections for some countries for the year 2010.

Attachment: National CO₂ Emissions: 1996, International Energy Association Report "CO₂ Emissions from Fuel Combustion, 1971–1996."

Ranking of developing countries and countries with economies in transition by 1996 total emissions from fossil-fuel burning, cement production, and gas flaring.

Ranking Among Non-OECD Countries
(Million metric tons of carbon equivalent (mtc))

Rank and Country	Carbon equivalent (mtc)
1 China*	867
2 Russia	414
3 India	235
4 Republic of Korea*	112
5 Ukraine	106
6 Poland	100
7 Mexico	93
8 South Africa	87
9 Brazil	78
10 Saudi Arabia*	68

*Not a USAID assisted country.

Source: International Energy Association.

Question 2b. During the hearing, you testified that India was the sixth largest emitter of greenhouse gas and was the second fastest growing emitter. Please provide the following information:

—For these countries indicate the USAID projects funded in fiscal years 1997, 1998, 1999, and proposed 2000.

Answer. USAID funds climate-related activities in seven of the top ten developing and transition countries. Ranked by greenhouse gas emissions, these are Russia, India, Ukraine, Poland, Mexico, South Africa, and Brazil. All are considered key or priority countries under USAID's Climate Change Initiative, begun in fiscal year 1998 and continuing through 2002.

The following table lists projects funded or proposed in these countries under the Climate Change Initiative.

USAID Climate-related Projects in Developing and Transition Countries
(In millions of U.S. dollars)

Country	FY 98	FY 99	FY 00
RUSSIA:			
Power Restructuring & Pricing and Regulatory Reform	1	0.055	0
Energy Efficiency through NGO Programs with Municipalities and Industry	0.25	0.3	0.5
CFC Initiative	1	1	1.5
Forestry Management	1	1	0.7
Forestry and NTFP Business Development	1	0.648	0.7
Emissions Trading	0	0.006	0
Business Development & Small Grants	0	1.148	1
INDIA:			
Increased Env. Protection in Energy, Industry & Cities	0	5.00	8.00
UKRAINE:			
Power Restructuring and Financial Improvement of the Power System	5	4.9	4.9
Energy Efficiency in the Municipal Sector	0.5	0.7	0.7
Global Climate Change Policy & Sustainable Development Work Group	0	1.4	2
POLAND:			
Local Government Administration & Energy Efficiency	3	2.5	0
Electricity Pricing and Regulatory Reform	1.5	0.6	0
GCC	0	5	0
MEXICO:			
Protecting Tropical Forests and Mangroves in Mexico's Parks	1.96	3.12	2.25

USAID Climate-related Projects in Developing and Transition Countries—Continued

(In millions of U.S. dollars)

Country	FY 98	FY 99	FY 00
Renewable Energy, Energy Efficiency, Improved Environmental Management Systems for Industry (Mexico Environmental Management Project)	2.23	2.043	2.65
SOUTH AFRICA:
Improved Access to Environmentally-Sustainable Shelter and Urban Services for the Historically Disadvantaged Population	2.8	3	3.5
BRAZIL:
Sustainable Forestry, Park Protection, and Sustainable Alternatives to Deforest in the Amazon and Atlantic Coastal Rain Forest	4.98	5.32	5.2
Renewable Energy and Energy Efficiency (Integrated Environmental Management Project)	0.42	0.797	0.8
Directed Research Component of the G-7 Pilot Program to Conserve the Brazilian Rain Forest	2	2	2

Source: USAID Management and Regional Bureaus.

Question 3. In your testimony, you mentioned “nothing indicates India is prepared to accept binding commitments” as called for in the Byrd-Hagel resolution. For each of the top ten developing countries identified in the previous question, please discuss any public announcements by the governments of these countries to accept binding commitments consistent with the Byrd-Hagel resolution.

Answer. Of the top ten developing and transition countries identified in the previous question, Russia, Ukraine, and Poland have each agreed to greenhouse gas target levels under the Kyoto Protocol to the UN Framework Convention on Climate Change. To the best of our knowledge, none of the remaining seven governments (China, India, Mexico, South Africa, Brazil, and Saudi Arabia) has to date made public announcements accepting binding commitments to reduce or limit greenhouse gas emissions.

Question 4. For each of your projects in developing countries, please identify the businesses involved and non-governmental organizations involved. Also, indicate the extent to which taxpayer funds have been provided to these organizations for these programs for the fiscal years 1997, 1998, 1999, and proposed 2000.

[NOTE: Inquiry clarified that this request pertains to information on energy and environment programs in USAID-assisted developing and transition countries.]

Answer. USAID summarizes activities and results, including principal contractors, in its annual submissions to Congress. In addition, each Congressional Notification on new projects and activities lists the key U.S. implementing organizations, if known. Also, the Agency tracks USG funding for climate change activities in forty-four countries, by activity (See response to question 2b).

Each USAID Mission keeps records on its activities, including partners and funding. The Agency does not require Missions to identify to Headquarters each private sector or NGO partner involved in each activity, or funding provided to each partner.

Question 5. For each of your projects, in both developing and developed (Annex I) countries, please describe all projects which contain activities related to the Kyoto Mechanisms, including emissions trading, joint implementation and the Clean Development Mechanism.

Answer. As the international development assistance arm of the U.S. government, USAID has a critical role to play in working with developing nations to reduce the rate of growth in emissions of greenhouse gases and decrease the threat climate change poses to sustainable development. USAID's climate change strategy, drafted in 1994 in response to Congressional request and revised in 1997 (prior to Kyoto) to target twelve key countries and regions, implements a “no-regrets” approach to climate-related intervention. “No regrets” refers to activities that provide climate change benefits in addition to their primary objectives of increased energy efficiency, cleaner energy production, more effective natural resource management and reduced urban pollution. This focus has been the mainstay of USAID's climate change program since its inception.

Providing countries with the training and tools required to mitigate climate change and reduce greenhouse gas emissions in a cost-effective manner is also central to USAID's Climate Change Initiative. USAID has funded, and continues to

fund workshops and technical training sessions for developing countries on flexible, market-based mechanisms.

In FY 1998 and FY 1999, USAID sponsored capacity building and educational training events on such flexible, market-based mechanisms. These events are related at least in part to elements of the UN Framework Convention on Climate Change (FCCC) and to market-based mechanisms of the type described in the Kyoto Protocol.

With these workshops and training sessions, we were able to strongly emphasize the necessity of market approaches to environmental management, to stress the importance of broader-based participation in pursuing the goals of the FCCC, and to elaborate and strengthen the market-based mechanisms and other elements, long supported by the United States and included in the Kyoto Protocol, in ways that protect and promote U.S. interests.

The attached summary describes activities USAID has sponsored in this regard. Attachment: USAID Activities Related to the FCCC and the Kyoto Protocol.

Question 6. During your testimony you mentioned that you were not jointly funding any international climate related activities. You also mentioned that as a participant in the "interagency team" USAID was aware of all other federal climate programs. Please provide the planning document that sets out USAID funding by country in relation to activities by other agencies, including in Argentina and Russia.

Answer. We were unable to find a statement in the transcript that USAID does not jointly fund international climate-related activities. For the record, it would be incorrect to say that USAID does not jointly fund any international climate-related activities. On the contrary, USAID works closely with other U.S. agencies, particularly DOE, EPA, USDA and the U.S. Forest Service, on climate-related activities that increase the use of renewable energy and energy efficiency measures, disseminate clean energy technologies, improve natural resource management, and reduce urban and industrial pollution and inefficiencies. These collaborations allow USAID to draw on external expertise as need arises.

In addition to public sector collaboration, USAID is very proud of its private sector partnerships, in which we jointly fund climate-related activities with private sector partners from the United States and developing countries. These partnerships allow the Agency to leverage its investment in training and capacity building into sustainable long-term solutions that reduce greenhouse gases in economically viable ways.

In his testimony, Mr. David Hales said that the interagency team that works on climate change issues is aware of what each of the agencies are doing. This interagency team is composed of representatives from all of the U.S. agencies addressing climate change. The team meets frequently to discuss and develop policy and to assure that the various agencies are coordinating their activities, where applicable, to allow the United States to best meet its foreign and domestic policy goals.

While there is no formal planning document that sets out USAID funding by country in relation to activities by other agencies, the OMB *Report to Congress on Federal Climate Change Expenditures* details funding by agency for climate change (see attachment to question 1c).

Question 7. During last week's hearing you testified that USAID has an internal and an external process for determining which technologies are suitable for inclusion in AID funded programs. Please provide these studies and indicate: 1) the non-governmental organizations that have supplied the analysis, and 2) any peer review done on these documents. Also, please provide documentation on which governmental staff and organizations participated in these evaluations.

Answer. In response to Sen. Hagel's question as to how USAID determines appropriate technologies for our energy programs and whether that expertise comes from inside or outside the Agency, I noted that USAID does both. As I said during the hearing, USAID has very talented folks within the Agency, and that we also often rely on experts from outside the Agency to help us determine appropriate technologies.

USAID uses a variety of methods for determining which technology is appropriate for demonstration or application in developing countries, including using recommendations from experienced USAID field and technical staff, existing literature and case studies, and commissioning feasibility studies and field assessments. USAID often relies on U.S. agencies such as Department of Energy laboratories or the U.S. Forest Service to assist in or to undertake assessments. In addition, USAID works closely with indigenous institutions in recipient countries to assess and recommend appropriate technologies.

Attached are representative samples of documents and organizations USAID uses in technology assessments for the energy, natural resource, and urban sectors. A complete compilation of technology assessments for each activity under USAID's Climate Change Initiative, with details on level of NGO involvement, peer review and a listing of participants involved in the analysis, would require a substantial effort by mission staff not required under existing reporting requirements. We are, however, happy to provide technology assessments for specific activities upon request.

Question 8. For technologies approved for your programs please provide documentation on current costs to deploy these technologies, current use of these technologies in the United States, and required taxpayer subsidies for deployment of these technologies in the United States.

Answer. USAID considers the deployment of economically viable technologies to be a key element of its sustainable development strategy. Technology scoping exercises for field application routinely cite the costs and benefits associated with deployment. A consideration of the cost-effectiveness of technology options is essential for attracting private sector investment and assuring long-term sustainability.

An exhaustive assessment of costs to deploy each technology and their current use in the United States would require a substantial effort by USAID Mission staff not required under existing reporting requirements. However, in the technology assessments provided in response to question 7, we have flagged the cost estimates for deployment.

USAID does not have information on U.S. levels of taxpayer subsidy for domestic deployment of these technologies.

Question 9. For technologies deployed through AID programs, please provide estimates of the full cost of greenhouse gas emissions reduction in dollars per metric ton carbon equivalent using such technologies.

Answer. Estimates for greenhouse gas emissions reductions in dollars per metric ton of carbon equivalent vary widely depending upon the technology and specific application. Factors such as fuel type and quality, estimation of quantity of fuel replaced or saved, the efficiency of the technology, and various other factors combine to make estimation difficult.

Under its Climate Change Initiative, USAID tracks agency-wide climate change funding by activity. It also measures quantitative results for all climate-related activities using thirteen indicators. These indicators measure policy and regulatory advances, training and capacity building, dollars leveraged and greenhouse gas emissions avoided through USAID climate-related activities. However, since most climate-friendly technology deployment is coupled with policies or programs that have other objectives than just greenhouse gas emissions reductions—such as power sector reform or sustainable forest management—it would be misleading to assess the cost per metric ton of greenhouse gas emissions reductions by simply relating funding for an activity with the greenhouse gas emissions avoided by that activity.

Question 10. During the hearing last week you testified that all AID activities are consistent with the voluntary commitments of the UN Convention on Climate Change. However, I am unaware of any provision in that treaty that provides for the trading of greenhouse gas emissions. If you believe that there is such a provision, please identify the provision, and explain how it would or could authorize AID to fund emissions trading activities.

Answer. The UN Framework Convention on Climate Change, to which the United States is a party, provides that the United States is obligated to “promote and cooperate in the development, application, and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases . . .” It adds that parties have additional obligations to “promote and cooperate in education, training and public awareness related to climate change and encourage the widest participation in this process . . .”.

USAID programs are part of the Administration's efforts to engage developing countries in activities that help them to build capacity and understand how these mechanisms might work to reduce global greenhouse gas emissions in cost-effective ways, while promoting sustainable development and supporting U.S. interests. USAID believes emissions trading to be one of the potential tools for meeting all three objectives.

Question 11. Please provide the Committee with any written legal opinion or decision and all reports, memoranda, or notes concerning any oral or written communications regarding AID's ability to fund emission trading programs.

Answer. To the best of my knowledge, USAID has neither requested, drafted, nor received legal opinions, decisions, reports, memoranda, or notes concerning any oral

or written communications regarding the Agency's ability to fund emissions trading programs.

